

## ABSTRACT

A 4-state bar code printing and reading system for use in physical distribution-related services such as mail pieces, receptacles, reception and management forms or the like, and a  
5 method for controlling the system are disclosed. The 4-state bar code printing system comprises a bar code information acquiring section for acquiring, storing and determining a mail piece sorting information; an information recorded density enhancing section for evaluating a value of a  
10 character, by using of a compression method depending upon a type of the information and digit, which are determined by the bar code information acquiring section; an input information encoding section for arranging the values of the bars produced by the information recorded density enhancing section in order  
15 of values of bars of the 4-state bar code, and dividing the values into groups each consisting of 3 bars; an error correcting codeword producing section for producing an error correcting codeword based on the result of the information encoding section the input value of an error correcting level;  
20 and a print frame producing section for arranging the error correcting codeword produced from the error correcting codeword producing section and the data produced from the information recorded density improving section in order of a start bar, a data, an error correcting codeword, and a stop  
25 bar, to print a 4-state bar code print font on a mail piece.